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—— A BRIEF HISTORY OF ——

Food, Nutrition, & Government Policy in America



JOSH SOUTER

FEE's
Essential History of
Food, Nutrition, and
Government Policy

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A Brief History of Food, Nutrition, and Government Policy in America

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Government intrusion is often obvious. We know when government taxes our income, stops us from using our drug of choice, or when they kick down our door and throw us in a cage. But sometimes, government actions are more subtle and confusing. It is often tempting to blame industry alone for the failures in the market and to ignore the substantial - but often less visible - role that government plays in regulating different markets. From the housing crisis and its relationship to banking, to healthcare and sky high costs, this tends to ring true. When it comes to food, nutrition, and its impact on health, blame is often allocated against the market by the uninformed individual.

The average person tends to vaguely understand the issue. They probably know a bit about farm subsidies, taxes, and the Food Pyramid. However, they most likely don't understand the level at which government regulates our food. There is a long and storied history of government agriculture policy, import tariffs, food quotas, shoddy science guidelines, and regulation, all of which gets passed over for more obvious scapegoats such as the market and corporations.

Regulatory Agencies

There are two main agencies that regulate food in the U.S; the Food and Drug Administration (FDA) and the United States Department of Agriculture (USDA.) Both are charged with overall food safety nationwide. But the distinction in jurisdiction is often incredibly confused, with both agencies regulating different aspects of the same foods. [For example](#), the FDA manages the feed chickens eat, but the actual chicken facility falls under USDA jurisdiction. These distinctions confuse consumers and producers while allowing the agencies to shift blame in the event of negative press. Both tend to mean well (as government institutions often do) but their policies have often had disastrous effects. One such consequence is the practice of [mandatory egg washing](#), while in Europe the practice is actually banned.



Crisco—Better than butter for cooking

The USDA was started under Lincoln in 1862. Today, it has an annual budget of USD \$155 billion, which is dramatically larger than the FDA's current USD \$5.1 billion budget. Approximately 80% of the USDA budget goes to food and nutrition service programs, aka SNAP, WIC, and the NSLP.

For the first 40 years of the USDA's existence, it didn't have a substantial impact on the overall food market. During that time, the department existed mainly for things like land grants, funding agricultural research, and agricultural education.

Enter Trans Fat

The USDA began to take a larger role in 1906 when the Pure Food and Drug Act and the Meat and Inspection Act were passed by Congress. These acts were largely a response to recent negative press in the meat industry thanks to the [work of journalist Upton Sinclair](#). They set the

stage for the USDA's much bigger role in regulation and created the Bureau of Chemistry, which was later separated into its own agency and renamed as the FDA in the 1930s.

In 1910, a soap and candle company named Proctor & Gamble filed for a patent on a new process called “hydrogenation.” Following the negative press from Upton Sinclair’s journalism, Proctor & Gamble was able to engage in a large media campaign that convinced consumers to switch from traditional meat products like lard, tallow, and butter, to P&G’s hydrogenated oil product Crisco. The company would go on to push their products via radio shows, eventually creating the term “Soap Opera” which they continued to do for almost 100 years. Denise Minger covers the history of Proctor & Gamble and the work of Upton Sinclair in great detail in this [excerpt](#) from her 2014 book “[Death by Food Pyramid](#).”

Proctor & Gamble worked hard to push the idea that their product was a healthy alternative to foods like tallow, lard and butter. They used the phrase, “It’s all vegetable! It’s digestible!” while also trying to appeal to the Jewish community with slogans like “[The Hebrew Race has been waiting 4,000 years for Crisco](#)” Crisco and hydrogenated oils would later go on to be specifically pushed by [several prominent organizations](#), including the National Heart Savers Association (NHSA), Time Magazine, The Center for Science in the Public Interest (CSPI), and The American Heart Association (AHA). While it has been very rare for governments to specifically endorse trans fats over the years, the policies of demonizing saturated fat - and fat in general - tend to push people and companies towards bad alternatives. These policies often allow for companies to make specific approved health claims on food that meets low and confusing governmental standards.

Pre and Post Depression Policies

In 1916, the [Federal Farm Loan Act](#) (FFLA) was pushed through Congress with the goal of increasing credit to rural family farmers. It did so by creating a federal farm loan board, twelve regional farm loan

banks, and several farm loan associations. The Act came three years after a very similar bill created the Federal Reserve, which also had twelve regional banks. The Fed did for Wall Street and banks what the FFLA did for farmers, mainly funding and price stabilization - at least in theory.

The [Agricultural Marketing Act of 1929](#) (AMA), under Herbert Hoover, established the Federal Farm Board with a revolving fund of 500 million dollars. The act was sponsored by Hoover in an attempt to stop the downward spiral of crop prices. Hoover aimed to buy, sell, and store agricultural surpluses by generously lending money to farm organizations, which they could use to invest in fertilizers and new equipment. The Federal Farm Board's purchase of surplus product could not keep up with the production; farmers realized that they could just sell the government their crops, with no limit on how much the Farm Board would buy. Farmers just produced as much as they possibly could, since government guaranteed that they would purchase it. This went on until the Federal Farm Board ran out of money.

In 1929, the Great Depression hit. Following President's Hoover's failure to resolve the crisis, new president Franklin Delano Roosevelt decided that he would resolve the issue through large government programs and the liberal use of executive orders under the "New Deal" umbrella. Many of the New Deal policies had a fairly [negative effect](#) on the economy despite being created specifically to fix it. The most substantial of FDR's policies, in regards to food, was the Agricultural Adjustment Act (AAA). Like the AMA, this act also aimed to stop prices from spiraling downward. FDR paid farmers to not produce food in order to control the supply and keep prices high. In some cases, farmers were even paid to kill livestock to restrict supply and raise prices. Congress paid for this policy by taxing the manufacturers of farming equipment and using that money to cover the farmer's losses as a result of restricting their farm land. The tax portion was eventually [ruled to be unconstitutional](#) in the Hoosac Mills decision. However, many of the policies regarding the land quotas continued for years, until many

of them were finally ended in the 1970s. The government reversed their stance, wanting instead to increase the food supply rather than restrict it.

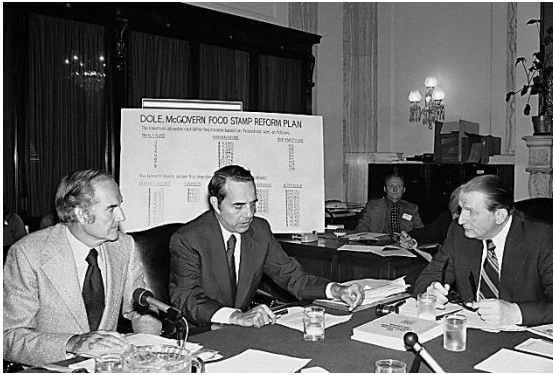
Many of these counterintuitive policies existed far after the great depression finally ended. Once large policies are enacted, they are often hard to remove. It recently came out that the Department of Agriculture was paying cherry farmers to [destroy cherries](#) in order to keep food prices high and it was only in 2015 that the National Raisin Reserve was [declared unconstitutional](#) by the Supreme Court.

The AAA also led to a few important Supreme Court cases. The first case was [Wickard v. Filburn](#). Roscoe Filburn grew more wheat than was allowed under New Deal policies. Roscoe only used the extra food to feed his family and his animals. He claimed that the limits did not apply to him in this case, because the limits were set in place to restrict the prices of interstate commerce, and since he had not sold the extra wheat, it didn't affect interstate commerce. The case eventually made its way to the Supreme Court, where he lost. The court ruled that since Roscoe no longer needed to purchase wheat, he was in fact affecting the price of wheat. Roscoe was forced to pay a fine, or destroy the extra wheat that he had grown. This case set precedent for establishing what counts as interstate commerce, thus allowing for expanding federal power. The law itself also wasted food during a time when people were starving due to the hardships of the depression.

The second major case was *U.S. v. Wrightwood Dairy*, which [allowed the federal government to regulate intrastate sales of milk](#) when those sales competed with the Federal Milk Marketing Order. Wrightwood established this, regardless of the fact that the milk was entirely intrastate, claiming that it did have an effect on interstate commerce - much like *Wickard v. Filburn* had done. This case allowed for further regulation of milk and the expansion of federal power, essentially allowing for the complete federal management of milk nationwide. The Federal Milk Marketing Order sets a minimum price standard ([among several other things](#)) for domestic prices of milk and milk products. Approximately two-thirds of the milk produced in the United States is sold under federal marketing orders. This makes it extremely difficult

to compete in the milk market and caters to already established firms. In some cases, this has even allowed congress to pass [specific measures](#) that stop smaller competitors from attempting to undercut competition. Federal control still exists today, to the point that selling state legal raw milk without a permit [can get you raided by federal agents](#).

Food Stamps and School Lunch



In 1939 the first version of the Food Stamps Program (FSP) was enacted. The initial program only lasted a few years before it was officially brought back in 1964 as a part of the “War on poverty.” The program was largely pushed

by Senator Bob Dole and Senator George McGovern, thus giving it bipartisan support. The program has gone through many changes since its rebirth, mostly in regards to eligibility and the amount of funding. In 2008 it was ultimately renamed the Supplemental Nutrition Assistance Program (SNAP), as the actual food “stamps” no longer existed; “EBT” or debit cards were used instead. While much of the money from these programs does indeed go to lower income people, there are some important drawbacks. These programs tend to [subsidize bad diets](#) more than healthy ones, as the people on them tend to choose unhealthy foods at higher rates. This program can also [incentivize lower employment](#) numbers, as people can be disqualified from the program if they make too much money or work too many hours. The SNAP program has gotten much larger over the years as well. Since 2011, the program has cost upwards of USD \$70 billion per year. This is largely in thanks to the [government pushing people](#) to sign up in order to generate economic output. There are also significant amounts of money that go to large corporate entities for facilitating the transfer of the EBT money from

the government to consumers. The multinational bank J.P. Morgan Chase is likely [the most prominent](#) of those companies.

In 1946, President Truman signed the National School Lunch Program into existence. The program was used as a new method of controlling prices on food as well as providing free or cheap food for all school children. Food provided to children must meet FDA and USDA national guidelines. In recent years healthy food has been a larger priority, but much of the food is [often unwanted and is wasted](#) as a consequence. Most reports show that the majority of the wasted food tends to be fruit and vegetables. A two year pilot study conducted from 2007-2009 estimated that more than 1.2 billion dollars' worth of food is [wasted](#) each year as a part of the program.

Shoddy Science

In 1955, President Dwight Eisenhower suffered a heart attack. He was then treated by a renowned physician by the name of Dr. Paul Dudley White. Dr. White introduced the President to the nutritional ideas of a man named Ancel Keys. Eisenhower took to Ancel's ideas and instructed Dr. White to [publicly announce](#) Eisenhower's support for Keys and his diet recommendations. Following these events President Eisenhower's suffered from: one stroke, Cholecystitis, Crohn's disease and six more heart attacks until his eventual death in 1969 due to congestive heart failure.

Keys had risen to influence the highest levels of the American government with his nutritional theory. Keys followed two main lines of thought: the diet heart hypothesis and the lipid hypothesis. These theories collectively state that blood cholesterol causes heart disease, and that saturated fat raises blood cholesterol. This theory dominated the American (and much of the world's) approach to nutrition and public policy for a long time. Key's rise is impressive enough on its own, but is made even more so by the fact that he had no real evidence to support his ideas.

Prior to 1955, Keys had formulated his own opinions, mostly based off of other studies paired with a brief visit to Naples, where he [observed evidence of low heart disease](#). He attributed this to lower fat intake. He did eventually conduct a study of his own, the Six Countries Analysis (not to be confused with his later similarly named [Seven Countries Study](#)). Keys was convinced that he had found concrete evidence for his hypothesis with his first study. He presented the 6 Country Analysis to the World Health Organization and it didn't go well. Keys was systematically ridiculed for confusing causation and correlation. Following this conference he was criticized [in a report](#) by Berkeley statistician Jacob Yerushalmy and New York State Commissioner of Health Herman Hilleboe. The report further exposed the flaws in his theory and pointed out his heavily cherry-picked data, which happened to overwhelmingly support his arguments.

None of this stopped Keys. Rather, it seemed to embolden him. In 1961 he made the [cover of Time Magazine](#) and his world famous 7 Country Study was published in 1978, when it would soon become the definitive source for nutrition standards and government food policy. Keys' work was a significant contributor to the vilification of animal products and other high fat food sources, which led to an increased consumption of "vegetable oil." Vegetable oil was thought to be healthy at the time, but has since been called heavily into [question](#). The same year that Ancel Keys appeared on the Time Magazine cover, the American Medical Association - of which Keys was a board member and was also funded by hydrogenated oil manufacturer Proctor & Gamble - endorsed his theory that saturated fat was bad for health.

Subsidies and the Farming Bubble

In 1972, Nixon was running for re-election. His Agriculture Secretary was a man named Earl Butz, a Purdue Agriculture Professor, who also happened to be a board member for several agribusiness firms. Butz wanted to ensure Nixon's victory and was concerned that Midwestern farmers would support Nixon's opponent and future nutritional crusader,

South Dakota Senator George McGovern. In order to accomplish this, Butz organized a massive grain sale to America's number one enemy, the U.S.S.R. He convinced farmers to sell their stockpiled and subsidized grains to the Russians, in what later came to be referred to as [“The Great Grain Robbery.”](#)

Estimates vary widely, but the Russians purchased somewhere between 3 and 30 million tons of different kinds of grains from the U.S. at record low prices that were largely due to subsidies and quotas. The Russians were in desperate need of food due to a massive drought topped with years of disaster due to [Lysenko's policies](#) in his role as the Director of Agriculture. This sale had a few key impacts, the first of which was to dramatically raise the price of wheat, soybeans corn, and other grains. [Some shot up as high as 390%](#), due to the massive shortages that came as result of the sale. In addition, numerous lawsuits were attempted for failing to deliver on shipments of grains. It eventually became such an issue that the Nixon administration had to create new tariffs to stop American goods from being shipped out to other countries in order to prevent further shortages.

The second major impact from the sale was that Earl Butz was able to convince farmers that there was a market for mass-produced grains. The farmers made a killing on the sale to Russia, and were bringing in more money due to shortages and the price increases. The sale helped insure Nixon's victory in the presidential race in one of the biggest landslides in history. Furthermore, Butz was able to implement his agricultural policies of massive growth. He removed most of the restrictions of land use that were still held over from The New Deal and the AAA. He encouraged farmers to expand; “Get big or get out” became his mantra. He encouraged farmers to grow their versatile feed crops - largely corn - from “Fence row to Fence row.”

Though Butz would eventually be forced to step down from his position due to [several political gaffes](#), including some racist comments, even going to jail briefly for tax evasion, his policies [largely continue](#) even today. Butz's policies pushed huge amounts of money into the farm industry. Butz worked to create policies of easy credit and low interest

loans, which farmers were strongly encouraged to take. These loans allowed for the expansion of farms, and the acquisition of new farm supplies and equipment. All this money led to an economic bubble in farming. [By 1980, this bubble started to burst](#). By 1984, Farm debt had risen to USD \$215 billion, double what it had been in 1978 and fifteen times the 1950's debt levels. Many farms were forced to sell to bigger farms and agribusiness companies like Cargill, DuPont, and Arthur Daniels Midland, which allowed for food production to become far more centralized. According to the [New York Times](#) in 1920, an estimated 32 million or 30.2 percent of the population of 105.7 million lived on farms. Those numbers dropped to 4.9 million people in 1987, at around 2% percent of the population, following a major decline in the 70's and 80's. "1981 through 1987, the farm population has lost an average of 2.5 percent annually. In the previous decade, the annual decline averaged 2.9 percent."

Health by Committee

Meanwhile during the farm bubble, Senator George McGovern looked to rebound from his presidential defeat. McGovern had been part of the Senate Select Committee on Nutrition, which he put his newfound time into with full enthusiasm. This commission, often referred to as the "McGovern Report," was originally established to deal with hunger and malnutrition before eventually being expanded into nutritional policy. The commission put together one of the first government health reports, based largely off the work of people like Nathan Pritikin and Ancel Keys. The latter would release his massive Seven Country Study, just a year after the commission released their findings.



In 1977, the commission released their results as the [predecessor to the Dietary Guidelines for Americans](#), which were officially issued first in 1980 by the USDA and the HHS and then every five years following

(not to be confused with the Nutritional Pyramid, which are different guidelines made only by the USDA, and were released later). Its main recommendations were: eat less fat, eat less cholesterol, eat less refined and processed sugars, and eat more complex carbohydrates and fiber. The commission was actually the first place where the term “complex carbohydrates” appeared. These policy recommendations pushed people away from things high in fat - especially high in saturated fat, which was demonized even more than fat in general. These included foods such as: beef, dairy, pork, coconut, and sometimes nuts. People were generally encouraged to eat more things that were considered to be low fat, and “heart healthy.” Vegetable oil, which is a misleading name for a number of products that mostly do not come from what we consider to be traditional vegetables, was often pushed for its health benefits. Other products that were considered to be lower in saturated fat - like margarine, despite its high prevalence of trans fat - were also [pushed by several different organizations](#) and were essentially backed by the government’s scientific committees.

Sugar and Subsidies

In the early 1970’s, billion-dollar agribusiness company Arthur Daniels Midland (ADM), was having trouble using the excess corn that it had obtained following the Butz era. Luckily for their business model a process known as “wet milling” had recently been developed; it allowed them to convert their corn into a new product. High fructose corn syrup (HFCS) was invented and used to solve their inability to sell all of their corn.

From 1971 to 1997 Dwayne Andreas was the CEO of ADM. Andreas was an extremely well-connected political entrepreneur. He had been funding both sides of the political aisle for years. He was also one of the chief men responsible for convincing Nixon to adopt Butz’s policies, and he even directly financed Bernard Barker, one of the Watergate burglars. His company was later [fined USD \\$100 million dollars](#) (the

largest fine of its kind at the time) for its involvement in a massive price-fixing scheme. It even ended up landing his son (CEO at the time) in jail.

In the early 1980s Dwayne realized that even with current corn subsidies being channeled into his HFCS, he was still having trouble competing with traditional sugar. [So he came up with a plan](#); he funded his competition. Dwayne poured money into sugar lobbying firms in Florida, in order to help them influence sugar tariffs, and making his product more competitive. In 1982, Reagan did in fact enact new sugar tariffs that were modified 6 times by Congress over the next two years. Shortly after, in 1984, both Coke and Pepsi announced on the [exact same day](#), that they were switching their products from Sugar to high fructose corn syrup. That same year President Reagan visited Dwayne at his Decatur headquarters, where Dwayne rewarded him by commissioning a [7-foot-tall statue](#) to commemorate the event.

The consequences of these policies are still in debate. Many contend that HFCS is actually no worse for you than regular sugar, and some studies back that claim. Other studies, however, tend to show us opposite results. A 2010 Harvard observational control trial on rats showed that rats whose only difference in diet was HFCS, gained as much [48 percent more weight than the sugar control group](#). Another study shows that countries with higher levels of HFCS as compared to sugar [do in fact have higher rates of diabetes](#). The study's conclusion was "all indicators of diabetes were higher in countries that use HFCS as compared to those that do not."

If we ignore the somewhat contentious sugar issue for a moment, the mass production of corn has other significant downsides. Thanks to low corn prices, corn has become the primary food source for cows, which brings with it a number of issues. While it has been shown that cows on a corn diet create less methane, the total process of this procedure ultimately [creates more methane](#). In short, feeding corn to cows is a larger contributor to climate change than it would be to feed them grass. It is also not as efficient production-wise, as land is essentially doubly used; one plot of land is used growing the corn, and another for housing

the cows. In the case of grass fed cows, they are often pastured only on lands that otherwise are not suitable for large scale agriculture anyway.

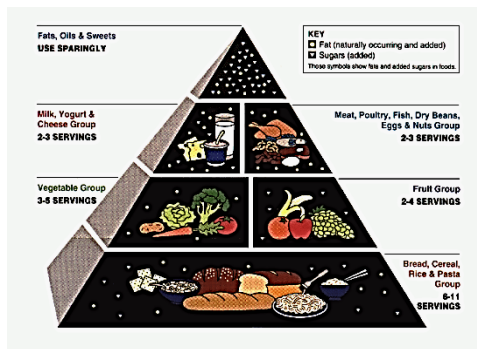
Additionally, cows have not evolved to have corn as their primary food source; this tends to lead to nutrient imbalances in beef products used for human consumption. Furthermore, [the corn tends to make cows sick](#); many animals have died after falling ill because corn was the primary ingredient in their diet for much too long. It can also ruin the meat in some cases; things like organ meats often have to be discarded because they are so sick. And then, as a further consequence, to deal with the sick cows, they are fed large amounts of antibiotics to counter the effect of their diets.

Finally, cows also tend to grow more when on antibiotics. Farmers thus have even less incentive to take their animals off of them. This [overuse of antibiotics](#) is one of the most [significant causes for rising antibiotics resistance](#) worldwide, which threatens to dramatically affect our ability to treat disease and to successfully perform surgery on patients. On top of all this, it is often cheaper to feed cows highly processed [candy and junk food](#), than to give them corn feed.

Corn as a food product is certainly not the only thing that ADM deals in; ethanol from corn is in fact one of the company's largest exports. It's estimated that as of 1996, ADM produced approximately 60% of the ethanol in the United States. As such, ADM was the chief beneficiary of a [54-cent-per-gallon tax credit](#) that the federal government allowed to producers of corn-derived ethanol.

In the late 1980s, ADM was having trouble competing against the far more efficient sugar-based ethanol from Brazil. So Dwayne did what any good political entrepreneur would do; he pressured Jimmy Carter for more government-backed loans for ethanol plants and a restrictive tariff on Brazilian ethanol. Carter did as most other politicians had done, and [obliged him](#). Carter enacted \$340 million in new loans for ethanol plant production, and a tariff that essentially barred Brazilian ethanol from U.S. markets.

The Food Pyramid



In 1991, Secretary of Agriculture Edward Madigan announced that the nearly complete federal Food Guide Pyramid [would be postponed](#). Though his official reason was that the Pyramid would be “confusing to children,” it seems far more likely

that he was responding to political pressure of groups like the National Cattlemen’s Association, who had been vocal about the placement of the beef and meat food group in the Pyramid. The Pyramid had been in development for nearly ten years under the supervision of nutrition professor Louise Light.

Light had been tasked with updating the government’s “Basic Four” food guide, which had been released in 1956 as a replacement for the [Basic 7](#). The goal was to create something that went much further than basic food recommendations; Light and her team of nutritionists aimed to remove foods that they saw as unhealthy. Her guide kept sugar below 10% of daily calories and limited refined carbohydrates and kept grains at a maximum of 2-3 servings per day, preferably in whole grain form. Light and her team encouraged five to nine servings of fruits and veggies, and recommended quality proteins like eggs and nuts. Good fat sources, like olive oil and flax seed were also encouraged. Generally satisfied with their well-researched guidelines, Light and her team submitted the Pyramid for review.

Unfortunately, her guide was rejected and swapped out with dramatically altered guidelines, to the point that one might be justified in wondering why they even bothered to hire someone to create such a guide, only to almost completely ignore it. Denise Minger sheds some light on the changes to the Pyramid in [Death by Food Pyramid](#). “The guide Light and her team worked so hard to assemble came back a mangled, lopsided perversion of its former self. The recommended grain

servings had nearly quadrupled, exploding to form America's dietary centerpiece: six to eleven servings of grains per day replaced Light's recommended two to three... and rather than aggressively lowering sugar consumption as Light's team strived to do, the new guidelines told Americans to choose a diet "moderate in sugar," with no explanation of what that hazy phrase actually meant."

Light was shocked and horrified by the changes. Despite her best attempts, she wasn't able to get her version of the Pyramid approved. She was never given any justification for why the guidelines were changed, other than being told that healthy food was too expensive and that people on food stamps couldn't afford it. The USDA largely recognized grains to be interchangeable with fruit and vegetables from a nutritional perspective, and didn't see any significant problems with their version of the Pyramid. Light went on to [write a book](#) about the whole ordeal in 2006.

Ultimately, the Pyramid was released in 1992 and no significant changes were made in between the time that Madigan postponed the Pyramid and the time that he finally approved it. However, significant amounts of money and time were spent attempting to improve the project anyway. There only were a few cosmetic changes, such as the style of noodles in the picture were altered along with the color of the chopsticks. The Food Pyramid was thus approved and published in multiple educational texts and posters; it was slapped on cereal boxes nationwide, and often marketed towards children with a nice government endorsement for cereal grains.

Drugs, Supplements and Labels

In 1990 [The Nutrition Labeling and Education Act](#) was passed. The law made it mandatory for food manufactures to label their food products with nutritional breakdowns of their foods in terms of macro nutrients, certain micronutrients and ingredients. It also required that all nutrient content claims ('high fiber', 'low fat', etc.) and health claims (heart healthy) must meet FDA regulations. Since the FDA has long viewed

certain natural nutrients as healthy and other things as unhealthy (such as saturated fat), certain guidelines are set only according to nutrient content. For example, [the FDA believes that Avocados are less healthy than pop-tarts](#). This is due only to the fat content with no thought given to anything else.

In 1994, Congress passed the [DSHEA Act](#). The act's main function is to allow manufacturers to produce supplements as they see fit. They do not require FDA approval in the same way that a drug needs to. The FDA characterizes and regulates products primarily [according to their intended use](#). If the intended use is to 'promote health,' the product is viewed as a dietary supplement. By contrast, if the intended application of a product is to treat or prevent a disease, it is considered to be a drug.

Many people tend to have issues with this act, as it does not seek to prevent harm in the same way that the FDA does with drugs. It is only reactive and bans supplements when harm has been proven. But if the same standard for drugs was applied to supplements, it is we would probably have far less of them, likely at a higher cost, as pointed to a study by the Rand Corporation, that found that price controls (through approval processes) could have [disastrous effects on the human lifespan](#). The price of prescription drugs is already incredibly high; some estimates have it as [high 2.6 billion dollars](#) to bring one drug to market, and that only refers to drugs that actually get approved. A Tufts study has shown that drug development and approval costs [have increased 145% from 2000 to 2013](#).

There is also some evidence to show that, by delaying drug approval, lives that could have been saved [are not](#). There are also several people who have died by taking FDA-[approved](#) drugs as well. It's even estimated that legal or approved drugs [now kill more people than illegal drugs do](#). There are also many questionable products that are FDA-approved that have shown to have long term harmful effects in different studies, like [aspartame and other artificial sweeteners](#), but are generally ignored due to their FDA stamp of safety.

Assessing the Damage and Reform

In 1996, the [Federal Agriculture Improvement and Reform act](#) (the FAIR act, not to be confused with the FAIR Education act) was passed in an attempt to roll back many of the subsidies of the last fifty years. The law increased planting flexibility, among other things, by allowing participants to plant 100% of their total contract acreage with any crop, except with [limitations](#) on fruits and vegetables. Following the act, there have since been many attempts to [repeal the changes](#) made by the FAIR act in favor of older policies of subsidies and Federal control.

In 1997 the USDA was [sued](#) for years of discrimination against black farmers, primarily during the 1980s and 90s. The Supreme Court case of *Pigford v. Glickman* required that the USDA pay 1.15 billion dollars (as of 2010) for their discriminatory policies. These cases also led to [hispanic farmers making similar claims](#), but with less success.

In 2002, science journalist Gary Taubes made the first real and wide-reaching criticism of the low fat movement with an article in The New York Times magazine, [“What if it’s all been a big fat lie?”](#) Taubes was met (and still is) with [significant criticism](#) from most of the mainstream health and journalist community. But Taubes started the first real conversation against the nutrition orthodoxy, as well as the first significant examination of Ancel Key’s work. Much of his work has since been pushed into mainstream agreement. Taubes has also been further vindicated when it came out in 2016 that the sugar industry had [paid scientists](#) to blame fat rather than sugar as the main culprit for things like heart disease.

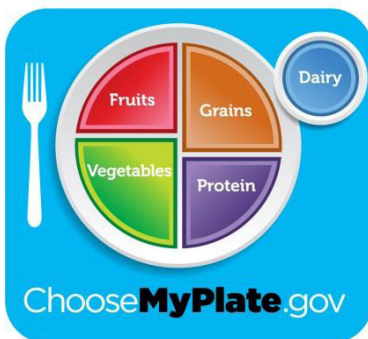
In 2006, the FDA [made a major change](#) to how their nutritional guidelines were enforced. All foods now needed to be labeled with the amount of trans fats in their ingredient list, but the wording on this is somewhat confusing. FDA guidelines allow for any food that contains .4 grams or less of trans fat per serving to be rounded down to zero. This means that companies could legally claim to be “trans fat free” as long as it was under the limit per serving. Since serving size is still an arbitrary number decided by companies to fit their needs, it’s certainly possible

that this legislation caused people to think they were making healthy choices by avoiding trans-fat, when in reality they may not have been. Many companies specifically label [their products](#) with FDA approved terms to give the appearance of being a healthy food.



In 2013, a scientist named Fred Kummerow [sued the FDA](#) for not acting sooner. After nearly six decades of warnings from Fred (and several other people and organizations) about the dangers of hydrogenated oils and trans fats, and demonstrating that these oils were often

the main culprits of heart disease - not saturated fats or cholesterol, the way Ancel Keys and so many others had theorized for so long - the FDA finally listened. Sometime after Fred's petition, the FDA announced that trans-fat from hydrogenated oils would no longer be recognized as safe, and manufacturers would have to prove its safety before putting it into food. This ruling was not completed until 2015. A three-year timeline has been set before it is no longer allowed to be used in foods anywhere in America, which would effectively [ban trans fat from hydrogenated oil sometime in 2018](#). This action comes more than a hundred years after the inception of these oils, and the FDA (formerly the Bureau of Chemistry) has failed to do anything about it for almost a century. The policy that has been in place for the last ten years may have even made things worse. The ban also comes after a massive decline in consumption of trans fats due to businesses and manufactures following consumer demand and eliminating it on their own voluntarily. Thus, as is often the case, legislation follows a cultural shift, rather than preceding it. The ban could still be misleading as well, as hydrogenated oil is only the most common source of trans fat, not the only one.



Despite this ruling, not all branches of the government seem to be completely in agreement. The [MyPlate.gov](#) website, the successor of the Food Pyramid, seems to

add trans-fat as an afterthought. When giving a list of foods to avoid, hydrogenated oils are listed underneath “foods containing saturated fat,” and there is far more emphasis on avoiding saturated fat than trans-fat. Both donuts and cheese are listed as equally harmful foods to avoid, among several other bad comparisons. The new MyPlate image is also even less detailed and confusing than the old Food Pyramid. Cholesterol has however finally been [removed](#) from the “things to moderate” list, after decades of claiming it was a significant contributor to heart disease. It’s interesting to see how this myth has gone on for so long, when even Ancel Keys himself acknowledged that dietary cholesterol played a “trivial” role and “required no further evidence,” while evidence has otherwise [been mounting](#) for years.

The 2014 Farm bill was passed in an attempt to curb spending on farm welfare. The bill changed the structure of government subsidies but [did not cut them overall](#). The law ended a few specific types of subsidies, such as the direct payment program, the countercyclical program, and the Average Crop Revenue Election program. In doing so, it also expanded the largest farm subsidy program, crop insurance, and added two new subsidy programs, the Agricultural Risk Coverage (ARC) and the Price Loss Coverage (PLC) program. It seems a bit too soon to tell, but based on current evidence “costs of the new subsidy programs are turning out to be [much higher](#) than the CBO predicted in early 2014.”

The Local Level

In addition to these many issues that affect food on a federal level, there are several instances of local government creating new policies that are detrimental to our health. Here are a few examples: Wisconsin recently [banned butter](#) from grass-fed cows. Many local governments [ban gardens](#) in front yards or in residential zones. Food laws in general are one of the most significant contributors to [food waste](#), with estimates as high as 160 billion pounds of food wasted each year. A series of mostly state laws, known as [Ag-Gag laws](#), tend to bar people from exposing bad or abusive practices that they see on farms, such as the unsanitary

conditions that cows are often kept in. On some occasions, people have actually been arrested for [feeding the homeless](#). Some states have tried to force companies to [inject vitamins into their food](#) or else they have to change the name of their product. It's also not uncommon for organic farms and producers of raw milk to suffer from SWAT style raids for things as simple as having "[grass that was too tall, bushes growing too close to the street, a couch and piano in the yard, chopped wood that was not properly stacked, a piece of siding that was missing from the side of the house, and generally unclean premises.](#)"

Can the Market Save Us?

Despite everything, there is still plenty of reason to be hopeful. There are several new startups, companies, and cutting-edge research that aim to make us healthier through better food options and preventive healthcare. Here are a few examples: Companies like [Labdoor](#) aim to act as regulatory agency by testing as many different supplements as they can for nutrient quality and toxic contaminants such as lead. All of this is free to view for consumers. [23andme](#) does affordable genetic testing for anyone who wants to determine their ancestry and their genetics in order to better understand what health conditions they may be at higher risk for. [Wellnessfx](#) offers full blood tests in order to determine your vitamin, minerals, blood lipid numbers, etc. that are both cheaper and more extensive than your average doctor's office. [Teloyears](#) is a new company that lets you measure your chronological age against your biological age, in order to help determine if your lifestyle is adding to or detracting from your lifespan. New spectroscopy devices such as [SCIO](#) and [Tellspec](#) threaten to make nutrient labeling all but obsolete with their ability to use light waves to analyze the nutritional and contaminate content of food directly. Companies like the [Oklahoma Surgery Center](#) aim to cut out waste and give people upfront cheap quotes on surgical procedures and all-inclusive care.

Companies like [Butcher Box](#) will ship grass fed beef and pastured animal products directly to your door. Startups like [Thrive Market](#) aim

to be an online crossover of Whole foods and Costco while [Blue Apron](#) is one of many companies that ships ready-to-cook healthy foods with instructions directly to your door for you to prepare. [Josephine](#) is a new startup that lets you buy from, or cook food for your neighbors. [EPIC](#) provides sustainable pastured animal products in convenient packages, while also working with institutions like [The Savory Institute](#) to help push restorative and sustainable agriculture and farming.

There has also been lots of new evidence to show the benefits of [ketogenic diets](#), especially when paired with other treatments such as [fasting](#), [hyperbaric oxygen](#), etc., in treating many different conditions, including [cancer](#) and epilepsy. There has also been lots of new evidence for drugs that have long been seen as harmful or recreational only. Drugs such as [MDMA](#), [psilocybin](#), [ibogaine](#) and [LSD](#) have recently become topics of popular conversation due to the massive potential they have for treating things like depression, addiction, and PTSD. This is in addition to all of the new preventive and sports-based treatments that have gained attention in the last few years as well. Things like [cryotherapy](#), [infrared sauna treatments](#), [Normatec air compression](#), [isolation tanks](#), [CVAC altitude simulators](#), along with several other new ways of approaching health.

While the problems with government as well as the nutrition and pharmaceutical industries are still many, the market has slowly been trying to fill the gap. With new research constantly entering the mainstream consciousness, sensible policy is more likely to take shape than it ever has been before. The need for government management of the food industry, if there ever was one, is getting smaller by the day.

